

## CLIMATOLOGICAL DATA FOR AUGUST, 1912.

## DISTRICT No. 12, COLUMBIA VALLEY.

EDWARD A. BEALS, District Editor. THEODORE F. DRAKE, Acting District Editor.

The August rainfall this season was the most remarkable in the history of the district, and the attendant cloudy, cool weather made conditions more representative of the winter than the summer type. The most prominent exception to the foregoing existed in southwestern Oregon where there was little rainfall and normal sunshine. In fact, in the southern half of the State, both east and west of the Cascade Range of Mountains, harvesting conditions were reported to be excellent. Farther north, however, operations were hindered by the moisture, and numerous reports indicated a probable loss due to the wet weather. Hop growers, in particular, were apprehensive of damage from the heavy rains at the close of the month. In Idaho, where four times the normal amount of rain fell, the weather was extremely unfavorable for the ripening and harvesting of grain, and the curing and gathering of hay crops. In the lower valleys most of the crops matured. A rainfall so heavy as to be locally called a cloudburst visited Huntington, Oreg., on the 2d, and much property loss in the city resulted. A ranch house 7 miles west of Huntington was washed away, involving the loss of four lives. Rains of similar severity caused considerable damage in other portions of the county on the same date, notably near Weatherby, where the flood of water covered the railroad track with gravel for a distance of a quarter of a mile, and interrupted traffic for 24 hours. With this exception transportation of all kinds proceeded without material interruption except in localities where the heavy rains caused very muddy roads, thereby impeding vehicle traffic. Construction work of every nature was carried on almost uninterruptedly throughout the month. The last few days of August were marked by a cold, rainy period, and on the 30th frosts were very general east of the Cascade Mountains.

## TEMPERATURE.

August was characterized by cool weather in all sections of the district. There were a few warm days occurring intermittently during the forepart of the month, and one distinct warm spell which began on the 21st and lasted several days. During this period maximum temperatures of  $90^{\circ}$  and over were recorded at a majority of places in the district, and at stations along the Columbia River east of the Cascade Mountains and in the sheltered valleys of Idaho  $100^{\circ}$  was not infrequently recorded. This warm period was almost immediately followed by the coolest period of the month, which culminated in light killing frosts on elevated lands in eastern Oregon and eastern Washington, and over practically the entire district east of the Blue Mountains. The weather for the month was coolest along the Oregon-Washington coast, in south-central Oregon, and in the Rocky Mountains. Maximum temperatures, generally, were recorded on the 23d and minimum temperatures on the 30th.

The mean temperature for the month as computed from the records of 264 stations was  $63.1^{\circ}$ , or  $2.1^{\circ}$  below the normal. The highest temperature recorded was  $106^{\circ}$ , at

Blalock, Oreg., and Hanford, Wash., on the 23d, and the lowest was  $17^{\circ}$ , at Roseberry, Idaho, on the 30th. The highest mean temperature was  $73.4^{\circ}$ , at Blalock, and the lowest  $52.6^{\circ}$ , at Seneca, Oreg.

## PRECIPITATION.

The rainfall was much in excess of the normal in practically all portions of the district, except in Josephine and Jackson Counties in southwestern Oregon, and along the middle reaches of the Snake River in Idaho, where the drought was interrupted by only a few light showers. The rainfall was heaviest in northwestern Oregon and western Washington, and at many places in these sections it exceeded any previous amounts ever recorded in August. In Idaho, also, the rainfall surpassed all records for August, and in the Montana watershed it was double the usual amount. The most pronounced periods of rain were as follows: From the 1st to 3d, 14th to 18th, and 27th to 31st, inclusive, the heaviest precipitation occurring in the last period.

The mean precipitation for the district as computed from the records of 373 stations was 2.04 inches, an excess of 1.75 inches. The greatest daily amount recorded was 3 inches, at Clearbrook, Wash., on the 31st, and the largest monthly amount 9.30 inches, at Yale, Wash. There were four stations, all in Idaho, at which only a trace of rain fell.

## THE RIVERS.

The Willamette River fell slowly until about the middle of the month when rather unusually heavy rains occurred that caused it to reach its highest stages before the 20th. The average stages were about one-half foot above normal. At Portland the average was 0.6 foot below normal. The highest stage at Portland was 7.2 feet on the 14th, and the highest at Salem was 2.1 feet on the 18th. The lowest stage at Portland was 4.9 feet on the 30th, and the lowest stage at Salem was 0.2 foot on the 14th and 15th.

The Columbia River fell slowly during the month and averaged 0.9 foot below normal. The highest stage at The Dalles was 13.3 feet on the 1st, and the highest at Umatilla was 7.2 feet, on the same date. The lowest stage at The Dalles was 8.1 feet, on the 29th and 30th, and the lowest at Umatilla was 6.5 feet, on the 27th and 28th.

The Snake River averaged about 1 foot above normal. The highest stage at Lewiston was 3.1 feet, on the 4th, and the lowest stage was 1.2 feet, on the 29th.

## MISCELLANEOUS PHENOMENA.

Thunderstorms occurred over the entire district but were of most frequent occurrence in southern Idaho from the 1st to the 3d, and from the 14th to the 17th. Hail was reported from several stations and fog formed at Tatoosh on 13 dates. Frost formed in Idaho, Montana, and eastern Oregon the latter part of the month, but little damage was reported.

TABLE 1.—Climatological data for August, 1912. District No. 12, Columbia Valley.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.		
				Mean.	Departure from the normal.			Total.	Departure from the normal.			Number of rainy days.	0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.				
					Highest.	Date.	Lowest.		Date.	Greatest daily range.	Total.									
<i>Montana.</i>																				
Anaconda.	Deer Lodge.	5,300	10	57.6	-3.4	86	26	28	30	42	2.23	+ 1.29	0.72	0	10	9	15	7	nw.	
Butte.	Silver Bow.	5,716	17	59.0	-3.5	88	26	33	30	37	1.92	+ 1.01	0.45	0	7	8	9	14	J. R. Wharton.	
Columbia Falls.	Flathead.	3,100	16	59.4	-2.7	93	15	25	30	52	1.65	+ 0.28	0.63	0	7	15	4	12	s.	
Como.	Ravalli.	3,700	3	61.5	-	93	24	33	30	39	1.14	-	0.32	0	8	19	4	8	.....	
Dayton.	Flathead.	7	60.5	-	91	23†	34	30	40	0.92	-	0.35	0	3	16	7	8	.....		
East Anaconda.	Deer Lodge.	5,500	6	58.2	-	84	9	34	30	33	2.18	-	0.45	0	9	9	16	6	sw.	
Fortine.	Lincoln.	2,975	6	57.4	-	88	22†	30	13	49	1.65	-	0.45	0	9	12	3	16	w.	
Hamilton.	Ravalli.	3,575	9	62.4	-2.0	90	24†	35	30	39	1.18	+ 0.40	0.35	0	8	13	7	11	n.	
Hat Creek.	Powell.	6,000	2	57.8	-	90	14	31	30	55	2.51	-	0.83	0	14	7	15	9	w.	
Haugan.	Missoula.	3,150	-	57.8	-	90	14	31	30	55	1.33	-	0.85	0	7	9	13	8	sw.	
Heron.	Sanders.	2,261	-	60.9	-	94	15	36	12†	54	3.35	-	1.74	0	13	15	2	14	w.	
KalisPELL.	Flathead.	2,965	13	59.8	-3.1	88	24	33	30	44	1.03	+ 0.14	0.51	0	9	9	16	6	w.	
Libby.	Lincoln.	2,055	2	59.7	-	92	8	32	30	54	1.46	-	0.93	0	6	11	13	7	.....	
Lost Creek.	Deer Lodge.	5,200	2	59.2	-	90	24	30	30	48	1.84	-	0.65	0	5	15	6	10	w.	
Missoula.	Missoula.	3,225	32	63.0	0.0	91	24	30	30	48	1.88	+ 1.07	0.65	0	11	11	11	11	sw.	
Ophir.	Powell.	6,800	3	57.8	-	90	14	31	30	55	1.92	-	1.05	T.	5	11	9	11	E. S. Wilton.	
Ovando.	do.	4,207	12	57.6	-0.3	85	14†	30	17	49	3.69	+ 2.75	0.73	0	14	0	30	1	S. B. Muchmore.	
Philipsburg.	Granite.	5,275	8	67.5 <sup>a</sup>	90 <sup>b</sup>	7	25 <sup>c</sup>	30	51 <sup>d</sup>	2.34	-	0.78	-	0	8	8 <sup>e</sup>	10 <sup>f</sup>	sw.		
Plains.	Sanders.	2,475	13	62.0	-1.0	89	23	31	30	41	1.93	+ 1.00	0.70	0	9	11	0	20	G. T. Bramble.	
Pleasant Valley.	Flathead.	3,500	4	55.2	-	85	23†	25	13	56	2.59	-	0.75	0	14	10	5	16	M. H. Pierce.	
Polson.	do.	2,920	4	63.7	-	90	24	37	30	36	2.47	-	0.74	0	6	6	8	2	A. D. Stillman.	
St. Ignatius.	Missoula.	2,700	6	61.9	-	89	8†	36	30	47	2.83	-	0.49	0	9	10	18	8	F. P. Brown.	
Saltese.	do.	3,600	7	61.7	-	89	23†	30	30	45	1.10	-	0.20	0	9	17	5	9	U. S. Reclamation Service.	
Stevensville.	Ravalli.	61.7	-	89	23†	30	30	45	1.10	-	0.56	0	5	15	8	8	w.			
Thompson Falls.	Sanders.	2,462	6	62.6	-	92	23	33	30	51	1.00	-	0.40	0	5	9	9	13	University Orchard Co.	
Willow Glen Stock F'm	Deer Lodge.	5,064	1	56.8	-	87	23	28	28	44	1.20	-	0.40	0	5	9	9	13	U. S. Forest Service.	
<i>Wyoming.</i>																		J. E. Luce.		
Afton.	Uinta.	6,200	8	54.8	-	89	26	30	46	2.12	+ 0.82	0.52	0	10	13	6	12	A. V. Call.		
Alta.	do.	7,000	2	54.8	-	82	27	26	30	46	3.38	-	0.73	0	12	14	8	9	Mrs. Lucy Brown.	
Beechler River.	Yellowstone Park.	5,900	12	55.5	-3.1	83	26	20	30†	46	2.50	-	1.20	0	7	11	13	7	.....	
Bedford.	Uinta.	5,900	-	53.4	-	82	22	30	30	45	2.73	-	0.71	0	9	21	4	6	.....	
Moran.	Yellowstone Park.	7,000	6	54.6	-	81	9	29	30	47	3.75	-	0.98	0	10	9	10	12	U. S. Army.	
<i>Nevada.</i>																				
San Jacinto.	Elko.	-	7	-	-	91	24	-	-	-	0.05	-	0.05	0	1	26	2	3	F. M. Marchant.	
<i>Utah.</i>																				
Standrod.	Boxelder.	-	-	62.9	-	86	24†	35	30	33	2.19	-	0.91	0	8	16	12	3	sw.	
<i>Idaho.</i>																				
Albion.	Cassia.	4,650	10	-	-	-	-	-	-	-	1.20	+ 1.39	0.45	0	5	17	3	11	C. E. Bocock.	
Almo.	do.	3	-	-	-	-	-	-	-	-	-	-	0.98	0	6	24	6	1	Wm. D. Cahoon.	
American Falls.	Oneida.	4,341	21	63.8	-4.5	94	24†	30†	30	54	1.90	+ 1.39	0.38	0	6	24	6	1	Geo. Stoll.	
Arrowrock.	Boise.	3,100	-	-	-	-	-	-	-	-	-	-	0.38	0	6	15	14	2	U. S. Reclamation Service.	
Blackfoot.	Bingham.	4,503	16	60.5	-5.7	91	24	35	13†	50	1.62	+ 0.89	0.73	0	6	16	5	10	E. A. Dowd.	
Blackfoot Dam.	Bannock.	6,200	3	58.4	-	85	26	31	30†	44	2.35	-	0.85	0	7	16	5	10	S. C. Waddell.	
Bogus Creek.	Boise.	4,200	4	-	-	-	-	-	-	-	-	-	0.85	0	7	16	5	10	F. P. Ingraham.	
Boise.	Ada.	2,737	27	68.1	-3.7	96	8	40	30	37	0.07	-0.09	0.04	0	3	14	9	8	nw.	
Bonner Ferry.	Bonner.	1,850	5	59.0	-	89	24	32	30	45	2.44	-	0.90	0	8	16	9	6	U. S. Weather Bureau.	
Boulder Mine.	Boise.	4,800	3	-	-	-	-	-	-	-	-	-	0.18	0	7	23	5	3	Patrick Moriarty.	
Buhl.	Twin Falls.	3,800	5	67.6	-	98	26	37	30	44	0.62	-	0.08	0	1	18	13	0	S. C. Orr.	
Caldwell.	Canyon.	2,372	8	66.2	-	95	8†	33	30	47	0.21	-	0.12	0	4	11	11	9	W. M. Boone.	
Caldwell Experiment Station.	do.	66.8	-	98	8	35	30	49	0.23	-	0.13	0	3	-	-	-	-	C. B. Hampson.		
Camas.	Fremont.	4,815	4	-	-	-	-	-	-	-	-	-	1.29	-	1	22	5	4	Mrs. Ednah Faulkner.	
Cambridge.	Washington.	2,651	16	65.0 <sup>a</sup>	-5.3	98 <sup>b</sup>	23†	30 <sup>c</sup>	30	56 <sup>d</sup>	0.55	+ 0.14	0.25	0	3	-	-	-	Chas. H. Shepherd.	
Cedar Creek Dam.	Twin Falls.	5,220	2	-	-	-	-	-	-	-	-	-	0.56	0	5	14	13	4	ne.	
Chesterfield.	Bannock.	5,424	16	59.2	-0.8	99	11	28	28	69	3.57	+ 2.43	1.45	0	6	20	5	6	nw.	
Clarks Fork.	Bonner.	2,084	-	59.7	-	86	23†	34	11	42	3.98	-	1.95	0	11	13	11	7	ne.	
Clyde.	Custer.	6,000	-	-	-	-	-	-	-	-	-	-	0.31	0	2	-	-	R. L. Sutcliffe.		
Council.	Adams.	3,059	-	67.2 <sup>a</sup>	94 <sup>b</sup>	23†	33 <sup>c</sup>	31	46 <sup>d</sup>	0.39	-	0.68	0.25	0	3	14	13	4	ne.	
Culdesac.	Nez Perce.	1,520	4	64.2 <sup>b</sup>	97 <sup>c</sup>	5†	35	30	55 <sup>d</sup>	2.32	-	0.68	0.10	0	10	13	6	12	ne.	
Deary.	Latah.	2,854	-	59.3	94 <sup>b</sup>	8 <sup>c</sup>	32	30	51 <sup>d</sup>	2.37	-	1.40	0	8	10	11	10	sw.		
Dent.	Clearwater.	1,350	6	66.3	-	98	23†	43	31	54	2.45	-	1.13	0	8	10	14	7	Emil Schuessler.	
Driggs.	Fremont.	6,097	5	56.0	-	81	26	31	20	41	2.10	-	0.60	0	9	9	5	17	W. H. Durrant.	
Emmett.	Canyon.	2,350	5	69.1	-	98	24†	31	30	45	0.85	-	0.37	0	3	15	16	0	U. S. Forest Service.	
Forney.	Lemhi.	6,000	12	-	-	-	-	-	-	-	-	-	0.37	0	3	15	16	0	M. B. Merritt.	
Garden Valley.	Boise.	3,800	4	-	-	-	-	-	-	-	-	-	1.29	-	1	22	5	4	Mrs. Gertrude M. Ross.	
Garnet.	Elmore.	2,375	13	72.6 <sup>a</sup>	-3.8	103 <sup>b</sup>	24	42	39	47 <sup>c</sup>	1.29	-	1.02	0	4	-	-	-	A. A. Kenison.	
Glens Ferry.	do.	2,569	4	70.0	-	105	24	34	30	50	0.62	-	0.42	0	2	22	4	5	I. E. Perkins.	
Gooding.	Lincoln.	3,572	3	66.9	-	98	24†	30	30	50	T.	-	T.	0	0	19	10	2	John Krall, jr.	
Grand Forks.	Shoshone.	3,000	3	56.6	-	90	8	28	30	56	2.75	-	1.73	0	10	13	4	14	F. W. Beier.	
Grandview.	Owyhee.	3,000	3	68.1	-	102	8	33	30	58	0.15	-	0.10	0	2	26	3	2	N. G. Massey.	
Grimes Pass.	Boise.	5,200	3	-	-	-	-	-	-	-	-	-	0.65	0	5	26	4	1	Jos. M. Clarke.	
Guffey.	Owyhee.	2,38																		

TABLE 1.—Climatological data for August, 1912. District No. 12—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.					Precipitation, in inches.					Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, tunneled.							
<i>Idaho—Continued.</i>																					
Meridian.	Ada.	2,657	2	67.4	97	87	35	30	47	0.09	0.09	0	1	16	12	3	nw.	A. W. Garrett.			
Mesa.	Adams.	3,275	2	67.4b	96	23	35b	30	46b	0	0	0	0	0	0	0	nw.	I. S. Carter.			
Middle Fork.	Idaho.	1,397	2	67.0	95	23	41	30	43	1.27	0.42	0	7	16	0	15	w.	Jos. McGhee.			
Miner.	Twin Falls.	4,110	8	67.0	98	26	35	30	47	T.	T.	0	0	18	10	3	w.	James K. Young.			
Moscow.	Latah.	2,748	20	62.2	-3.0	91	97	37	30	51	2.10	+ 1.24	1.05	0	12	9	11	nw.	University of Idaho.		
Mountainhome.	Elmore.	3,150	7	66.1	98	23	26	30	56	0.08	0.08	0	1	21	10	0	w.	Mrs. Ellen Manion.			
Murtaugh.	Twin Falls.	6	63.0b	91b	24†	37b	30	48b	0.23	0.23	0	1	0	0	0	0	w.	J. E. Steinour.			
New Meadows.	Adams.	3,950	8	60.0	91	8	34	17	45	2.16	0.57	0	8	19	2	10	n.	E. G. Dunn.			
Nezperce.	Lewis.	3,082	3	60.0	-3.7	95	26	35	47	43	-0.26	0.20	0	3	11	18	2	n.	P. Mitchell.		
Oakley.	Cassia.	4,700	19	65.5	95	23	43	30	43	0.32	0	0	0	0	0	0	n.	John Adams.			
O'Hara Bar.	Idaho.	1,557	2	66.2	98	1†	37	30	50	2.43	0.95	0	9	8	19	4	n.	J. D. Agnew.			
Orofino.	Clearwater.	1,027	8	61.4	89	24†	31	30	46	2.22	0.18	0	0	12	7	12	sw.	Geo. Alteneder.			
Payette.	Canyon.	2,159	22	67.0	-5.2	98	15	32	30	51	0.26	+ 0.05	0.23	0	2	23	3	s.	E. F. Allen.		
Pebble.	Bannock.	5,277	3	61.4	89	24†	31	30	46	2.42	0.87	0	7	12	13	6	s.	Alexander McQueen.			
Pierson.	Custer.	7,000	2	55.8	88	1	10	30	58	0.42	0.23	0	0	4	28	1	s.	D. P. Clarke.			
Pleasant Valley.	Ada.	3,000	5	66.1	99	24	30	30	50	0.09	0.04	0	0	7	15	11	se.	C. E. Friedrich.			
Pocatello.	Bannock.	4,483	13	65.8	-4.7	92	24	40	30	41	1.19	+ 0.63	0.40	0	0	0	0	sw.	U. S. Weather Bureau.		
Pocatello Nursery.	do.	5,396	5	63.4	91	14	36	30	44	1.67	0.60	0	6	14	15	2	sw.	Mrs. Fannie E. Say.			
Poplar.	Bonneville.	5,500	2	63.4	89	24	37	30	41	1.23	+ 0.23	0.39	0	8	16	6	9	sw.	C. M. Lawrence.		
Porthill.	Bonner.	1,665	23	61.2	-2.3	89	24	37	30	41	1.23	+ 0.23	0	0	0	0	0	n.	H. A. French.		
Priest River Experiment Station:	No. 1.	2,500	58.3	80	8†	32	30	33	2.96	1.04	0	14	11	6	14	s.	D. R. Brewster.				
	No. 2.	2,500	60.2	88	8†	32	30	44	2.54	1.00	0	13	11	6	14	sw.	Do.				
	No. 3.	57.8	88	23†	31	30	51	2.68	0.99	0	13	11	6	14	se.	Do.					
Pyle Creek.	Bolse.	3,100	3	64.8	95	26	25	30	45	0.41	0.90	0	7	23	4	4	w.	P. V. Smith.			
Richfield.	Lincoln.	4,306	3	64.8	96	23	31	30	45	0.41	0.23	0	3	22	9	0	sw.	Idaho Irrigation Co.			
Roseberry.	Boise.	4,872	1	54.3	86	23†	17	30	53	0.44	0.30	0	3	13	16	2	sw.	J. L. Bumgarner.			
Roseworth.	Twin Falls.	4,650	6	64.4	94	26	32	30	51	0.77	0.13	0	1	7	11	13	nw.	D. B. Hartwell.			
Rupert.	Lincoln.	4,204	6	64.4	94	26	32	30	51	0.77	0.41	0	5	20	7	4	sw.	Will Parry.			
St. Anthony.	Fremont.	4,968	15	62.4	-1.7	90	8	35	30	41	2.20	+ 1.23	1.08	0	11	8	12	11	w.	Heber C. Sharp.	
St. Maries.	Kootenai.	2,263	15	62.4	90	23	34	30	41	2.20	+ 1.23	1.08	0	11	8	12	11	nw.	J. S. Turnbull.		
Salmon.	Lemhi.	4,040	7	61.2	93	26	27	30	51	0.35	0.15	0	5	23	8	0	nw.	B. C. d'Easum.			
Sandpoint.	Bonner.	2,086	2	58.6	89	24	32	30	48	2.62	1.22	0	12	13	5	13	s.	J. H. Edgerton.			
Sheep Hill.	Boise.	5,000	3	63.4	95	24	31	30	51	0.66	0.02	0	3	0	0	0	s.	C. M. Gardner.			
Shoshone.	Lincoln.	3,988	4	63.4	95	24	31	30	51	0.53	0.34	0	5	19	6	6	s.	Zell Truman.			
Silver City.	Owyhee.	6,250	5	63.4	95	24	31	30	51	0.53	0.34	0	0	0	0	0	nw.	A. D. Bradfield.			
Smith Prairie.	Elmore.	5,200	3	63.4	95	24	31	30	51	0.53	0.34	0	0	0	0	0	nw.	Wm. W. Newell.			
Soldier Creek.	Blaine.	5,755	12	59.0b	86	24	31d	30	43	0.74	0.72	0	2	0	0	0	nw.	J. E. Minear.			
Spirit Lake.	Kootenai.	2,560	12	61.0	90	22	34	31	47	2.79	1.65	0	10	18	3	10	ne.	M. C. Krause.			
Springfield.	Bingham.	4,420	4	64.1	96	23	35	31	51	1.75	0.68	0	4	16	11	4	sw.	Mrs. W. A. Edwards.			
Sugar.	Fremont.	4,892	5	59.6	89	27	30	33	48	1.66	0.50	0	9	15	7	9	sw.	Utah-Idaho Sugar Co.			
Sunnyside.	Elmore.	3,500	3	70.4	100	25†	33	30	54	T.	T.	0	0	0	0	0	nw.	Col. M. W. Wood.			
Tripod Mountain.	Boise.	4,300	3	63.4	7	65.2	98	24	34	33	0.88	0.39	0	3	22	3	6	nw.	Mrs. Verna Paddock.		
Twin Falls.	Twin Falls.	3,825	7	61.2	98	24	34	30	53	0.16	0.08	0	3	13	18	0	sw.	J. A. Waters.			
Vernon.	Fremont.	5,050	14	58.6	-4.7	87	26	28	30	47	2.30	+ 1.71	0.60	0	10	14	10	sw.	A. M. Statery.		
Wallace.	Shoshone.	2,728	5	59.8	92	8	33	30	47	2.20	1.39	0	8	0	0	0	sw.	U. S. Weather Bureau.			
Weiser.	Washington.	2,114	12	70.2	102	23	32	30	51	0.89	0.45	0	3	14	6	11	se.	J. W. Lapish.			
Wendell.	Lincoln.	3,400	4	68.6	100	24†	31	30	50	T.	T.	0	0	21	10	0	w.	Chas. L. Dingler.			
<i>Washington.</i>																					
Aberdeen.	Chehalis.	162	21	60.0	-1.0	90	21	39	27	37	3.96	+ 2.90	2.03	0	6	6	22	3	w.	C. S. Weatherwax.	
Anacortes.	Skagit.	60	18	60.4	80	7	43	13†	33	1.17	+ 2.30	1.22	0	6	17	12	2	nw.	Douglass Allmond.		
Baker.	do.	200	6	63.4	90	7	43	29	38	4.40	1.02	0	10	13	4	14	sw.	R. M. White.			
Bellingham.	Whatcom.	60	17	61.8	+ 1.2	82	22	40	28	31	4.47	+ 3.38	1.30	0	6	19	7	5	nw.	S. B. Mayhew.	
Bellingham (near).	do.	107	60.0a	96	23	35	31	51	1.75	0.68	0	4	16	11	4	sw.	U. S. Bureau of Plant Ind.				
Blaine.	do.	57	15	59.4	-0.6	78	7	40	28	33	4.66	+ 3.83	1.38	0	10	8	16	7	se.	J. W. Sheets.	
Blewett.	Chelan.	2,200	2	62.0	95	24	31	30	47	1.66	0.34	0	10	0	0	0	nw.	U. S. Navy Yard.			
Bremerton.	Kitsap.	30	2	66.6	94	23	44	28†	34	1.99	1.67	0	7	13	13	5	sw.	Mrs. H. F. Bertram.			
Brewster.	Okanogan.	1,620	2	66.6	94	23	44	28†	34	1.99	1.67	0	7	13	13	5	sw.	Geo. Landsburg.			
Bumping Lake.	Yakima.	3,400	12	62.6	-1.4	90	22	40	27†	38	6.34	+ 5.53	5.11	1.52	0	13	13	4	14	s.	I. S. Turner.
Cedar River.	King.	535	5	62.6	-1.4	90	22	40	27†	38	6.34	+ 5.53	2.50	2.50	0	12	10	13	8	s.	Geo. Landsburg.
Centralia.	Lewis.	212	19	62.6	-1.4	90	22	40	27†	38	6.34	+ 5.53	5.11	1.52	0	13	13	4	14	s.	Geo. Landsburg.
Cheney.	Spokane.	2,351	13	60.0	-2.2	96	22	32	14	54	1.69	+ 1.31	0.43	0	6	17	9	5	sw.	J. A. Balmer.	
Cle Elum.	Kittitas.	1,930	13	60.0	-2.2	96	22	32	14	54	1.69	+ 1.31	0.43	0	6	17	9	5	sw.	George Gibbs.	
Clearbrook.	Whatcom.	140	9	59.8	86	7	34	28†	42	7.81	3.00	0	10	8	12	11	sw.	I. B. Doolittle.			
Collax.	Whitman.	2,300	23	60.2	-5.2	95	5†	33	24	58	3.32	+ 1.71	1.24	0	6	19	4	8	sw.	W. L. Sax.	
Colville.	Stevens.	1,635	12	62.6	-3.1	96	24	39	13†	51	3.34	+ 0.58	0.51	0	7	12	6	13	s.	U. S. Forest Service.	
Colville Forest Station.	do.	60.0	23	88	23	32	29	44	44	4.56	2.00	0	10	15	2	14	sw.	Wm. Baines.			
Conconully.	Okanogan.	2,300	12	62.3	-2.3	89	23	36	29	39	2.06	+ 1.42	1.15	0	9	10	12	9	sw.	U. S. Reclamation Service.	
Cowiche.	Yakima.	1,874	12	66.4b	95b	23	42</td														

TABLE 1.—Climatological data for August, 1912. District No. 12—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years	Temperature, in degrees Fahrenheit.							Precipitation, in inches.							Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeasured.	Number of rainy days 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
<i>Washington—Contd.</i>																				
Kettle Falls.	Stevens.	1,265	3	65.0	.....	95	23	33	30	46	1.90	.....	0.65	0	9	14	11	6	Harry H. Cole.	
Kiona.	Benton.	430	7	.....	.....	.....	.....	.....	.....	.....	.....	2.06	0	11	9	15	7	ne.		
Kosmos.	Lewis.	775	6	62.2	.....	95	7	39	28	49	7.18	.....	1.49	0	12	14	8	9	sw.	
La Center.	Clarke.	250	15	60.2	-4.3	88	7†	40	28	43	5.42	+ 4.28	0.97	0	9	17	6	8	w.	
La Crosse.	Whitman.	1,400	3	63.0	.....	98	23	34	30	51	1.78	.....	0.65	0	9	8	5	13	nw.	
Lake Clealum.	Kittitas.	2,171	3	.....	.....	.....	.....	.....	.....	.....	2.40	.....	0.96	0	7	12*	5*	13*	w.	
Lake Keechelus.	do.	2,335	4	59.3	.....	89	22†	35	21	50	3.62	.....	1.20	0	9	11	7	13	w.	
Lakeside.	Chelan.	2,479	21	68.8	-3.7	94	22†	47	29	37	1.04	+ 0.67	0.50	0	7	7	18	6	w.	
Laurel.	Klickitat.	1,900	3	.....	.....	83	22†	40	28	26	1.42	.....	0.84	0	12	15	4	4	w.	
Laurier.	Ferry.	1,644	1	63.4	.....	92	22†	39	30	47	1.70	.....	0.43	0	9	5	10	10	s.	
Lone Tree.	Chehalis.	14	3	60.0	.....	83	21	50	2	21	4.50	.....	2.04	0	11	9	14	8	nw.	
Longmires Springs.	Pierce.	2,800	3	.....	.....	.....	.....	.....	.....	.....	5.40	.....	1.50	0	6	6	6	6	.....	
Lost Creek.	Okanogan.	3,125	3	.....	.....	.....	.....	.....	.....	.....	0.18	.....	0.07	0	7	11	12	8	se.	
McConline.	Grant.	1,072	3	68.0	.....	99	23	40	28	44	1.74	.....	0.65	0	6	18	4	9	se.	
McCubbers Ranch.	Yakima.	2,182	3	.....	.....	.....	.....	.....	.....	.....	2.10	.....	0.90	0	7	13	15	3	sw.	
Moses Lake.	Grant.	.....	.....	66.9	.....	98	22	43	26	44	0.90	.....	0.58	0	4	20	3	8	sw.	
Mottinger.	Benton.	307	12	71.3	-3.5	99	22†	48	30	39	1.67	+ 1.45	0.48	0	6	18	6	7	w.	
Mount Pleasant.	Clallam.	500	.....	58.4	.....	83	22	40	28	26	1.93	.....	0.71	0	10	14	7	10	Wm. M. Dorr.	
Moxee.	Yakima.	1,000	20	67.2*	-2.6	102*	23	36*	28	50	0.49	+ 0.29	0.27	0	7	15	9	7	nw.	
Newport.	Stevens.	2,400	2	59.2	.....	90	23	33	30	47	2.81	.....	1.07	0	12	12	9	10	e.	
North Head.	Pacific.	211	10	58.0	+ 0.1	73	21	52	30	18	3.20	+ 2.64	1.52	0	11	8	12	11	nw.	
Northport.	Stevens.	1,350	13	63.3	.....	92	8	49	39	42	2.22	+ 1.00	0.70	0	11	13	11	7	nw.	
North Yakima.	Yakima.	1,070	3	67.3	.....	95	23	42	28	38	0.50	.....	0.23	0	6	15	8	8	nw.	
Nutland.	Klickitat.	3	69.5	.....	100	23	45	28	37	0.56	.....	0.32	0	3	11	11	11	.....		
Odessa.	Lincoln.	1,540	9	64.9	.....	96	23	38	30	45	1.73	.....	0.65	0	8	11	13	7	nw.	
Olga.	San Juan.	50	22	58.6	-0.6	76	7†	44	28	42	3.62	+ 2.73	1.34	0	6	12	13	6	nw.	
Olympia.	Thurston.	200	24	62.2	-0.5	91	22	37	29	42	3.10	+ 2.44	0.98	0	11	15	6	10	n.	
Omak.	Okanogan.	850	3	67.0	.....	97	23	39	29	50	1.48	.....	1.06	0	7	14	10	7	s.	
Oroville.	do.	922	3	67.2	.....	97	22	40	29	44	1.22	.....	0.75	0	4	14	6	11	s.	
Peela.	Garfield.	5,000	3	.....	.....	.....	.....	.....	.....	.....	2.73	.....	1.13	0	8	20	4	7	nw.	
Pomeroy.	do.	1,500	20	65.8	-3.7	99	8	40	30	44	1.76	+ 1.24	0.96	0	7	11	13	7	w.	
Port Crescent.	Clallam.	259	17	54.6	-1.6	76	21	36	28	29	2.59	+ 1.89	0.99	0	10	6	16	9	nw.	
Port Townsend.	Jefferson.	80	22	60.0	-0.9	80	7†	46	28	29	2.29	+ 1.49	0.74	0	12	13	1	17	nw.	
Prosser.	Benton.	650	.....	68.6	.....	103	23	41	28	48	1.23	.....	0	0	10	19	4	8	sw.	
Pullman.	Whitman.	2,550	20	62.8	-4.0	93	8†	37	30	39	2.14	+ 1.41	1.23	0	0	10	19	4	8	sw.
Quets River.	Chehalis.	16	.....	.....	.....	.....	.....	.....	.....	.....	2.27	.....	0.75	0	4	14	6	11	.....	
Quinault.	do.	300	5	63.0	.....	95	7†	38	28	45	7.07	.....	2.10	0	10	12	15	4	w.	
Republic.	Ferry.	2,628	12	61.5	-1.7	91	23	32	29	49	2.17	.....	0.80	0	8	14	4	13	s.	
Rex Creek.	Chelan.	1,135	4	63.6*	.....	87*	22	40*	30	28	1.31	.....	0.66	0	5	9*	5*	16*	nw.	
Ritzville.	Adams.	1,825	13	.....	.....	.....	.....	.....	.....	.....	2.27	.....	0	0	11	7	9	15	s.	
Robertsville.	Klickitat.	1,910	6	63.6	.....	95	23	29	28	47	1.53	.....	0.84	0	6	8	22	1	.....	
Rock Lake.	Whitman.	.....	.....	93	7†	35	30	46	24	46	2.18	.....	0.54	0	6	13	5	13	sw.	
Rosalia.	do.	2,425	20	62.2	-2.9	91	8	39	19†	41	2.10	+ 1.38	0.81	0	10	12	11	8	sw.	
Russells Ranch.	Yakima.	2,870	3	.....	.....	.....	.....	.....	.....	.....	2.27	.....	0.90	0	7	15	11	5	w.	
Seattle.	King.	123	20	62.2	-0.9	83	22	48	28	45	2.49	+ 2.00	0.80	0	11	7	9	15	s.	
Sedro Woolley.	Skagit.	38	15	61.0	-0.5	84	7†	40	28	35	5.74	+ 4.17	1.55	0	10	14	7	10	w.	
Sixprong.	Klickitat.	1,240	5	70.0	.....	101	23	40	30	47	0.54	.....	0.36	0	3	24	5	2	sw.	
Skagit Power Dam.	Whatcom.	510	2	63.7	.....	96	7	42	29	44	3.09	.....	1.02	0	11	15	4	12	.....	
Snohomish.	Snohomish.	100	18	62.8	+ 0.5	88	21	38	26	43	5.00	+ 3.91	1.50	0	8	11	12	8	nw.	
Snoqualmie Falls.	King.	667	12	63.5	.....	99	7†	47	42	43	3.81	+ 2.29	0.91	0	12	15	0	16	.....	
Snoqualmie Pass.	do.	3,000	.....	.....	.....	.....	.....	.....	.....	.....	1.81	.....	1.30	0	7	12	14	5	sw.	
Snyders Ranch.	Okanogan.	2,200	3	59.6	.....	92	22	27	29	52	1.46	.....	1.04	0	4	9	17	5	sw.	
South Bend.	Pacific.	17	16	+ 0.1	88	7	44	29	36	6.51	+ 5.04	2.14	0	13	16	10	5	5	w.	
Spokane.	Spokane.	1,943	31	64.2	-3.7	92	23	46	30	37	2.06	+ 1.58	1.24	0	10	9	10	12	sw.	
State University.	King.	170	3	.....	.....	.....	.....	.....	.....	.....	1.81	.....	0	7	12	14	5	sw.		
Stokes Ranch.	Okanogan.	2,670	3	.....	.....	.....	.....	.....	.....	.....	2.27	.....	1.30	0	7	13	4	14	n.	
Summer.	Pierce.	77	4	61.6	.....	87	21	37	28	40	3.22	.....	1.09	0	11	13	4	14	sw.	
Sunnyside.	Yakima.	740	17	66.9	-3.1	100	23	39	28	47	0.74	+ 0.52	0.25	0	8	15	14	2	w.	
Tacoma.	Pierce.	213	26	61.8	-1.2	85	21	45	32	33	3.44	+ 2.74	1.33	0	8	6	12	13	n.	
Tatoosh Island.	Clallam.	85	27	55.6	+ 0.3	73	21	47	28	21	4.33	+ 2.22	1.98	0	12	8	11	12	s.	
Tieton.	Yakima.	2,000	3	61.1	.....	93	23	38	28	43	1.21	.....	0.61	0	6	14	7	10	sw.	
Touchet.	Walla Walla.	556	5	66.8	.....	100	23	42	19†	53	1.31	.....	0.45	0	7	12	13	6	sw.	
Touchet Ridge.	Columbia.	2,500	3	.....	.....	.....	.....	.....	.....	.....	5.18	.....	1.85	0	6	14	9	8	sw.	
Trinidad.	Douglas.	900	8	70.2	.....	100	23	46	16	36	1.04	.....	0.34	0	5	23	1	7	nw.	
Vancouver.	Clarke.	100	37	65.2	-1.0	91	7	48	28	38	3.57	+ 2.96	0.78	0	11	14	6	11	nw.	
Vashon Island.	King.	40	23	60.2	-2.8	78	21†	44	28	26	2.54	+ 1.96	0.98	0	11	15	5	15	s.	
Wahluke.	Grant.	410	8	71.0	.....	100	23	47	28†	41	1.05	.....	0.32	0	7	11	10	10	.....	
Wallace.	Okanogan.	4,000	3	69.6	-4.2	99	23	48	30	33	2.67	+ 2.22	1.03	0	8	16	7	8	sw.	
Walla Walla.	Walla Walla.	1,000	28	69.6	-4.2	91	23	34	29	30	2.67	+ 2.22	1.03	0	10	17	4	10	w	

TABLE 1.—Climatological data for August, 1912. District No. 12—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
<b>Oregon—Continued.</b>																				
Clif...	Lake...	4,300	5	57.4	.....	92	23	23	30	55	0.98	.....	0.30	0	8	7	19	5	nw.	John C. Green.
Condon...	Gilliam...	2,884	5	.....	60.8	- 4.3	85	23	41	67	41	2.18	+ 1.76	0.67	0	6	13	6	12	c. h. williams.
Corvallis...	Benton...	266	24	.....	54.8	- 4.6	91	23	22	30	59	0.61	.....	0.29	0	7	16	11	4	Oregon Agricultural College.
Crescent...	Klamath...	4,400	18	52.4	.....	92	23	34	30	45	2.33	+ 1.99	1.10	0	8	19	10	4	c. w. long.	
Dayville...	Grant...	2,200	18	.....	52.8	.....	86	21	46	27	34	3.5	.....	1.36	0	7	12	12	4	Dr. J. Campbell-Martin.
Deadwood...	Lane...	350	2	62.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	jos. Slemmons.	
Doraville...	Columbia...	600	10	60.4	- 1.5	86	7	42	28	32	4.88	+ 4.11	1.35	0	13	15	4	12	7	Jos. Hackenberg.
Drain...	Douglas...	300	10	63.6	.....	94	21	38	29	40	1.31	.....	0.60	0	7	10	11	10	Ira Wimberly.	
Echo...	Umatilla...	625	8	69.0	.....	102	23	42	31	45	1.42	.....	0.53	0	5	18	4	9	R. B. Stanfield.	
Ella...	Morrow...	830	8	69.4	.....	104	23	45	28	46	0.82	+ 0.54	0.31	0	6	21	2	8	Carl F. Troedson.	
Eugene...	Lane...	449	22	63.8	- 1.1	86	20	46	19	31	1.32	+ 0.70	0.41	0	5	15	5	11	University of Oregon.	
Fairview...	Coos...	142	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Wm. Bettys.		
Forest Grove...	Washington...	220	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Pacific University.		
Gardiner...	Douglas...	72	23	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Hon. J. S. Gray.		
Glendale...	.....	1,441	8	65.8	.....	96	22	41	31	46	0.09	.....	0.06	0	2	20	11	0	B. J. Simpson.	
Glenora...	Tillamook...	575	21	60.6	- 2.3	91	7	38	2	48	8.82	+ 7.67	2.95	0	9	11	3	17	Mrs. Jennie A. Reher.	
Gold Beach...	Curry...	40	11	58.6	.....	73	11	45	29	20	1.10	+ 0.87	0.50	0	3	16	14	1	John W. Riley.	
Grants Pass...	Josephine...	956	24	66.2	- 2.4	98	23	35	29	50	0.03	- 0.27	0.03	0	1	16	8	7	John B. Paddock.	
Grass Valley...	Sherman...	2,351	11	61.4	.....	98	23	31	30	50	0.88	.....	0.35	0	5	11	2	18	Agent O. (—) W. R. & N. Co.	
Gurdane...	Umatilla...	3,500	3	63.0	.....	90	24	32	30	28	0.15	.....	0.04	0	7	18	6	7	Miss Belle Ely.	
Headworks...	Clackamas...	719	10	.....	.....	43	17	.....	6.59	+ 4.98	1.50	.....	0	11	14	5	12	Portland Water Works.		
Heppner...	Morrow...	1,950	22	63.0	- 5.1	94	23	39	31	40	1.14	+ 0.87	0.08	0	8	14	10	7	Frank Gilliam.	
Herniston...	Umatilla...	451	5	68.7	.....	99	23	42*	30	46*	1.12	.....	0.29	0	6	21	4	6	C. W. Kellogg.	
Hermoso Rio...	Crook...	2,110	2	61.2	.....	96b	23	34b	27	54	0.47	.....	0.33	0	4	18	4	9	Carl T. Hubbard.	
Hood River:	Hood River...	300	22	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. L. Hasbrouck.		
No. 1...	.....	485	1	67.0	.....	99	22	44	28	42	2.07	.....	1.13	0	6	19	3	9	W. H. Lawrence.	
No. 2...	.....	620	1	57.1	.....	100	7	38	28	50	1.73	.....	0.78	0	6	17	13	1	U. A. Newman.	
No. 4...	.....	850	1	63.9	.....	96	22†	40	28	48	1.85	.....	0.86	0	6	17	10	4	Fordham K. Kimball.	
Huntington...	Baker...	2,165	11	.....	.....	98	23†	.....	.....	.....	1.47	+ 1.28	1.45	0	3	14	0	0	Agent O. (—) W. R. & N. Co.	
Jacksonville...	Jackson...	1,640	24	66.8	- 2.9	94	23	40	29	41	0.14	- 0.30	0.07	0	2	21	6	4	E. Britt.	
Joseph...	Wallowa...	4,400	23	59.8	- 2.2	90	23	29	30	43	2.28	+ 1.53	0.75	0	9	7	12	12	F. F. McCully.	
Klamath Agency...	Klamath...	4,169	4	.....	.....	92	23	35	30	39	1.89	+ 1.64	1.34	0	4	19	8	4	N. D. Ginsbach.	
Klamath Falls...	.....	4,100	23	62.2	- 4.7	88	23	35	30	39	1.89	+ 1.64	1.34	0	4	19	8	4	Augusta J. Hayden.	
La Grande...	Union...	2,784	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. A. Worsted.		
Lakeview...	Lake...	4,825	29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Ralph C. Koozer.		
McKenzie Bridge...	Lane...	1,400	11	63.0	0.0	97	21	34	30	51	3.87	+ 3.04	1.36	0	11	14	2	15	Geo. Frissell.	
McMinnville...	Yamhill...	182	25	68.0	+ 2.5	93	21	41	2	43	2.66	+ 2.10	0.84	0	8	13	5	13	M. E. Pettit.	
Marshfield...	Coos...	34	11	60.0	- 1.1	76	6†	41	29	28	1.64	.....	0.77	0	9	14	3	14	U. S. Weather Bureau.	
Meadow Brook Ranch...	Hood River...	850	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	John W. Palmer.		
Medford...	Jackson...	1,425	2	67.8	.....	96	22†	40	29†	44	0.07	.....	0.04	0	2	18	7	6	U. S. Weather Bureau.	
Merrill...	Klamath...	4,070	7	60.2	.....	90	23	29	16†	47	1.60	.....	1.40	0	3	23	5	3	Mrs. W. H. Hensel.	
Metolius...	Crook...	2,525	2	62.5	.....	93	23	34	29	37	0.64	.....	0.19	0	5	12	2	11	W. E. Lottman.	
Milkalo...	Gilliam...	1,400	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Frank Little.		
Miramonte Farm...	Clackamas...	195	24	64.5	- 0.5	89	21	45	27	37	3.73	+ 3.22	0.96	0	8	14	5	12	G. Muecke.	
Monroe...	Benton...	350	15	63.4	- 1.8	90	21	42	29	36	1.59	+ 0.99	0.68	0	7	16	4	11	L. A. Peek.	
Mount Angel...	Marion...	485	26	64.8	- 2.7	87	7†	49	28	28	3.56	+ 3.05	0.75	0	7	15	3	13	Dr. Urban Fischer.	
Mount Hood <sup>1</sup> ...	Hood River...	1,450	1	59.6	.....	92	23	36	28	44	2.40	.....	0.97	0	9	15	11	5	Isaac Beal.	
Musick...	Douglas...	5,000	3	55.6	.....	81	22	30	28	35	5.99	.....	1.35	0	9	16	1	14	Alex. Lundberg.	
Newport...	Lincoln...	69	25	58.6	- 1.1	79	29	45	29	34	5.66	+ 4.86	1.57	0	8	7	9	Wm. Mathews.		
Ortley...	Hood River...	1,000	1	65.6	.....	95	22†	42	28	35	1.81	.....	0.85	0	6	16	3	10	T. A. Decker.	
Paisley...	Wasco...	1,600	1	64.6	.....	95	22	37	2	40	1.30	.....	0.60	0	5	16	7	8	L. D. Firebaugh.	
Parkdale <sup>1</sup> ...	Lake...	4,500	9	61.6	.....	91	23	39	30	37	2.28	.....	1.02	0	7	19	7	5	E. C. Woodward.	
Pendleton...	Hood River...	1,650	2	61.6	.....	91	23	39	30	37	2.28	.....	1.02	0	7	19	5	7	S. G. Babson.	
Pilot Rock...	.....	1,070	23	66.9	- 3.3	99	23	37	30	46	1.79	+ 1.41	0.60	0	8	19	5	7	E. F. Averill.	
Pompeii...	Clackamas...	1,817	4	66.6	.....	99	23†	35	30	46	2.26	.....	0.73	0	8	22	0	9	John P. McManus.	
Portland...	Multnomah...	3,879	17	65.6	- 0.3	93	7	50	29	33	3.39	+ 2.74	0.88	0	11	12	4	15	E. Coalman.	
Port Orford...	Curry...	57	42	65.6	- 0.3	93	7	50	29	33	3.39	+ 2.74	0.88	0	11	12	4	15	U. S. Weather Bureau.	
Prairie City...	Grant...	3,425	1	62.1	.....	98	23	28	30	53	20.3	.....	0.84	0	9	17	7	7	J. D. Loucks.	
Prineville...	Crook...	2,864	16	.....	.....	95	12	31	29	50	0.95	.....	0.42	0	5	11	13	7	A. M. F. Kirchheimer.	
Prospect...	Jackson...	2,800	6	62.8	.....	95	12	31	29	50	0.95	.....	0.23	0	5	18	4	9	Geo. Summers.	
Ramsey...	Wasco...	1,350	11	61.0	.....	92	23	35	29	30	0.63	.....	0.60	0	5	17	4	10	E. G. Trumbo.	
Range...	Grant...	3,500	4	57.2	.....	92	23	25	30	50	1.45	.....	0.18	0	2	22	6	3	Mrs. Leah Fairman.	
Redmond...	Crook...	2,350	11	60.6	.....	96	23†	31	30	50	0.67	.....	0.25	0	3	16	8	7	Mrs. Leah Fairman.	
Richland...	Baker...	4,115	4	60.0	.....	86	22†	37	30	32	0.18	.....	0.10	0	2	15	8	6	U. S. Weather Bureau.	
Riverside...	Baker...	4,150	21	60.5	.....	90	24	31	27	45	2.31	+ 1.64	1.25	0	8	11	9	10	M. P. Baldwin.	
Roseburg...	Douglas...	510	34	65.1	- 1.1	94	21	40	29	39	0.59	+ 0.26	1.19	0	10	16	8	7	W. S. Southworth.	
Salem...	Marion...	120	22	64.6	+ 1.6	88	21	49	29	30	1.81	+ 1.38	0.38	0	11	16	1	14	G. W. Marvin.	
Seneca...	Grant...	4,800	1	52.6	.....	88	23	17	30	57	1.27	.....	0.90	0	4	12	10			

TABLE 2.—*Daily precipitation for August, 1912. District No. 12, Columbia Valley.*

Stations.	Watershed.	Day of month.																																		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Total.			
Anaconda.....	Missoula.....	.46	*	.81	.	.01	T.	.	.	.01	.	.	.	T.	.04	.01	.72	T.	.	.	.	.	.	.	.	T.	T.	T.	.06	T.	.11	2.23				
Butte.....	do.....	.45	.20	T.	.	T.	T.	.	.30	.	.	.	.	T.	.10	.42	T.	.30	T.	.	.	.	.	.	.	T.	T.	.15	T.	T.	1.92					
Columbia Falls.....	Flathead.....	.51	.	.04	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1.14			
Como.....	Bitter Root.....	.19	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1.14			
Dayton.....	Flathead.....	.32	T.	T.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1.14			
East Anaconda.....	Missoula.....	*	1.29	T.	.	.01	T.	.	.	.03	.	.	.	T.	*	.06	.69	.	.	.	.	.	.	.	.	T.	T.	T.	.03	T.	.07	2.18				
Fortine.....	Kootenai.....	T.	.	.20	.	.	.	.	.	.	.	.	.	T.	T.	.15	.	.	.	.	.	.	.	.	.	.	T.	T.	.14	.02	T.	.45	1.65			
Hamilton.....	Bitter Root.....	.15	.35	.02	.	.	.	.	.	.	.	.	.	T.	.08	.	.15	.03	.	.	.	.	.	.	.	T.	T.	.06	.07	.	.24	2.51				
Hat Creek.....	Missoula.....	.24	.43	.20	T.	.01	.06	.	.	.04	.	.	.	T.	T.	.	.	.	.	.	.	.	.	.	T.	T.	.12	.16	L.	.05	.85	1.33				
Haugan.....	do.....	T.	.	.02	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	1.33			
Heron.....	Columbia.....	.	.06	.14	.07	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	1.46			
Kalispell.....	Flathead.....	.51	.	.05	.01	.	.	.	.	.	.	.	.	T.	.03	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	1.46			
Libby.....	Kootenai.....	T.	.	.02	T.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	1.46				
Lost Creek.....	Missoula.....	.65	.06	.52	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	1.84				
Missoula.....	do.....	.21	.02	.65	.10	.	.	.	.	.	.	.	.	T.	.01	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	1.84				
Ophir.....	do.....	.30	.	.15	T.	.	.	.	.	.	.	.	.	T.	.12	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	1.82				
Ovando.....	do.....	.60	T.	.35	.02	T.	T.	.	T.	.02	T.	.10	.	T.	.73	.20	T.	.51	T.	.65	T.	.	.	.	.	T.	.	.	.	.	3.69					
Philipsburg.....	do.....	.40	.23	.78	T.	.	.	.	.	.	.	.	.	T.	.15	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	3.34				
Plains.....	Columbia.....	.04	.	.04	.	.	.	.	.	.	.	.	.	T.	T.	T.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	1.93				
Pleasant Valley.....	Kootenai.....	.12	.60	.08	T.	.	.	.	.	.	.	.	.	T.	.11	.02	.01	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	1.93				
Polson.....	Flathead.....	.74	.	.13	.38	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	2.47					
Saint Ignatius.....	do.....	.25	.	.30	.70	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	2.47					
Saltese.....	Missoula.....	.	.	.	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	1.89					
Stevensville.....	Bitter Root.....	.10	.14	.07	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	1.00					
Thompson Falls.....	Columbia.....	.	.	.04	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	1.00					
Willow Glen Stock Farm.....	Missoula.....	.30	.20	.40	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	1.20					
<i>Wyoming.</i>																																				
Afton.....	Snake.....	.15	.	.35	.	.12	.03	.	.04	.	.	.	.	.	.	.52	.11	.	.13	.42	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2.12	
Alta.....	do.....	.69	.02	.29	.	.03	.	.	.	.	.	.	.	.	.	.02	.73	.51	.	.27	.22	.	.	.	.	.	.	.	.	.	.	.	.	3.38		
Bechler River.....	do.....	1.20	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.04	.06	.02	.04	.	.	.	.	.	.	.	.	.	.	.	.	.	2.50		
Bedford.....	do.....	.23	.06	.26	.	.	.	.	.	.	.	.	.	.	.	.	.51	.05	.28	.32	.	.	.	.	.	.	.	.	.	.	.	.	.	2.05		
Moran.....	do.....	.71	.	.12	.15	.	.	.	.	.	.	.	.	.	.	.57	.34	.07	.38	.16	.	.	.	.	.	.	.	.	.	.	.	.	2.73			
Snake River.....	do.....	.98	.04	.04	T.	.10	.	.02	T.	.	.	.	.	.	.	.54	.25	.07	.08	.50	T.	.	.	.	.	.	.	.	.	.	.	.	.	3.75		
<i>Nevada.</i>																																				
San Jacinto.....	Snake.....	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.05	0.05
<i>Utah.</i>																																				
Standrod.....	Raft.....	.07	.	.09	.	.	.	.	.	.	.	.	.	.	.	.	.11	.10	.	.91	.41	.	.	.	.	.	.	.	.	.	.	.	.	.	2.19	
<i>Idaho.</i>																																				
Albion.....	Snake.....	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1.20	
Almo.....	do.....	.15	.	.	T.	.	.	.	.	.	.	.	.	.	.	.	.10	.	T.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1.90		
American Falls.....	do.....	.04	.	.16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1.90		
Arrowrock.....	Boise.....	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1.90		
Blackfoot	Blackfoot.....	.73	.03	.03	.	.	.	.	.	.	.	.	.	T.	.	.	.05	.	.33	.	.	.	.	.	.	.	.	.	.	.	.	.	1.62			
Blackfoot Dam.....	do.....	.85	.10	.	.	.	.	.	.	.	.	.	.	T.	.	.	.65	.06	.35	.20	.	.	.	.	.	.	.	.	.	.	.	2.35				
Bogus Creek.....	Payette.....	.	.	.	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1.62			
Boise.....	Payette.....	T.	.	.02	.	T.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.07			
Bonners Ferry.....	Kootenai.....	.85	.	.11	.05	.	.	.	.	.	.	.	.	T.	.	.	.15	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2.44			
Boulder Mine.....	Boise.....	.18	.05	.07	.04	.	.	.	.	.	.	.	.	T.	.	.	.04	.	.11	.03	.	.	.	.	.	.	.	.	.	.	.	0.08				
Buhl.....	Snake.....	T.	.	T.	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.08				
Caldwell.....	Boise.....	.03	.	.12	.	.	.	.	.	.	.	.	.	T.	.	.	.03	.03	.	.	.	.	.	.	.	.	.	.	.	.	.	0.21				
Caldwell Experiment Station.....	do.....	.04	.	.13	.	.	.	.	.	.	.	.	.	T.	.	.	.06	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.23				
Camas.....	Lost R. Reg.....	.	.	.	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.55				
Cambridge.....	Weiser.....	.10	.	.25	.	.	.	.	.	.	.	.	.	T.	.	.	.02	.	.16	.	.	.	.	.	.	.	.	.	.	.	.	0.56				
Cedar Creek Dam.....	Snake.....	.14	.06	.	T.	.	.	.	.	.	.	.	.	T.	.	.	.82	.70	.10	.30	.20	.	T.	.	.	.	.	.	.	.	0.57					
Chesterfield.....	Port Neuf.....	1.45	.	.	.	.	.	.	.	.	.	.	.	T.	.	.	.11	T.	.	.04	.11	.09	.03	.	.	.	.	.	.	.	3.98					
Clarks Fork.....	Pend Oreille.....	.	.	.	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3.98					
Clyde.....	Lost R. Reg.....	T.	.	.08	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.32					
Council.....	Weiser.....	.	.	.	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.39					
Cluidesc.....	Clearwater.....	.	.	.	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.32					
Deary.....	do.....	.	.	.	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.28					
Dent.....	Snake.....	.54	.	.03	.	.	.	.	.	.	.	.	.	T.	.	.	.30	.22	.10	.13	.13	.	T.	.	.	.	.	.	.	.	2.45					
Driggs.....	Payette.....	.23	.	.37	.	.	.	.	.	.	.	.	.	T.	.	.	.06	.21	.12	T.	.	.	.	.	.	.	.	.	.	2.45						
Emmett	Payette.....	.	.	.	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.85					
Forney.....	Salmon.....	.	.	.	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.85					
Garden Valley.....	Payette.....	1.02	.	.15	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1.29						
Garnet.....	Snake.....	.	.	.	.	.	.	.	.	.	.	.	.	T.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.62					
Glenns Ferry.....	do.....	.42																																		

TABLE 2.—*Daily precipitation for August, 1912. District No. 12—Continued.*

TABLE 2.—Daily precipitation for August, 1912. District No. 12—Continued.

Stations.	Watershed.	Day of month.																													Total.						
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31					
<i>Washington—Con.</i>																																					
Laurier.....	Kettle.....	T.	.22	T.	T.				T.	.02	T.				T.	.39	.05	.02															1.70				
Lone Tree.....	Coast.....	T.							.06	.01	.22	.25				T.	.33	.204	.17														4.50				
Longmires Springs.....	Puget Sound.....								.90	T.		.20																						5.40			
Lost Creek.....	Columbia.....	T.	.05																																0.18		
McComine.....	Columbia.....		.19																																1.74		
McCumbers Ranch.....	do.....																																			2.10	
Moss Lake.....	do.....		.19																																0.90		
Mottinger.....	do.....		.41																																	0.90	
Mount Pleasant.....	Coast.....	.01																																		1.92	
Moxee.....	Yakima.....		T.																																	0.49	
Newport.....	Pend Oreille.....	T.	.62	.04	.01																														2.81		
North Head.....	Coast.....																																			3.20	
Northport.....	Columbia.....	.33	.01	.02	T.				T.	T.																									2.28		
North Yakima.....	Yakima.....																																			0.50	
Nutland.....	Columbia.....																																			0.56	
Odessa.....	do.....		.10																																	1.73	
Olga.....	Puget Sound.....																																			3.62	
Olympia.....	do.....																																			3.10	
Omak.....	Okanogan.....	.02		.04																																1.48	
Oroville.....	do.....																																			1.22	
Parker.....	Yakima.....																																			1.22	
Peola.....	Snake.....																																			2.73	
Pomeroy.....	do.....	T.	.12	T.																																1.76	
Port Crescent.....	Coast.....																																			2.55	
Port Townsend.....	Puget Sound.....	.01																																		2.29	
Pullman.....	Palouse.....	.01																																		2.14	
Quets River.....	Coast.....	T.																																		6.99	
Quinault.....	do.....	.02																																		7.07	
Republic.....	Kettle.....		.52	.08	T.																															1.31	
Rex Creek.....	Columbia.....																																				2.17
Ritzville.....	do.....		.12																																	2.13	
Robertsville.....	do.....																																			1.53	
Rock Lake.....	Palouse.....																																			2.16	
Rosalia.....	do.....	T.	.14																																	5.74	
Russells Ranch.....	Yakima.....	.31	.31																																	2.27	
Seattle.....	Puget Sound.....																																			2.27	
Sedra Woolley.....	do.....	.19																																		5.74	
Sixprong.....	Columbia.....																																			0.54	
Skagit Power Dam.....	Puget Sound.....	.04																																		3.09	
Snohomish.....	do.....	.10																																		5.00	
Snoqualmie Falls.....	do.....	.03																																		3.81	
Snoqualmie Pass.....	do.....																																				
Snyders Ranch.....	Columbia.....	.12																																		1.46	
South Bend.....	Coasts.....	.01																																		6.51	
Spokane.....	do.....	.29																																			
State University.....	Puget Sound.....																																				
Stokes Ranch.....	Columbia.....	.02																																			1.81
Summer.....	Puget Sound.....																																				
Sunnyside.....	Yakima.....		.11																																	0.74	
Tacoma.....	Puget Sound.....																																				
Tatoosh Island.....	Coast.....	.04	T.																																	3.44	
Tieton.....	Yakima.....																																				
Touchet.....	Columbia.....	.45																																			1.21
Touchet Ridge.....	do.....	.68																																			5.18
Trinidad.....	do.....																																				3.57
Vancouver.....	Puget Sound.....																																				
Vashon Island.....	Columbia.....																																				
Wahluke.....	do.....	.32																																			
Wallace.....	Okanogan.....	.01																																			1.95
Walla Walla.....	Columbia.....	T.	.64																																		

TABLE 2.—*Daily precipitation for August, 1912. District No. 12—Continued.*

Stations.	Watershed.	Day of month.																													Total.		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Oregon—Contd.																																	
Christmas Lake.....	SE. drainage.....	.09																															0.72
Cliff.....	do.....	.20	.05	.06																												0.98	
Columbia Mine.....	Snake.....		1.54																													2.49	
Condion.....	John Day.....																																
Coquille River Coast.....	Lighthouse.....																															1.22	
Cornucopia.....	Snake.....	T.	1.35																													2.60	
Corvallis.....	Willamette.....																															2.18	
Cracker Creek.....	Snake.....	T.	1.00																													1.14	
Crescent.....	Deschutes.....	.09	.07																													0.61	
Dayville.....	John Day.....	L	10	.38																												2.33	
Deadwood.....	Coast.....																															3.56	
Diamond.....	S.E. drainage.....	.05	.24	.27																												0.61	
Doraville.....	Columbia.....		T.																													4.88	
Drain.....	Umpqua.....																															1.31	
Dufur.....	Columbia.....																															.42	
Duncan.....	Umatilla.....	1.25	.35																													3.20	
Echo.....	do.....		.33																													.53	
Ella.....	Columbia.....																															.82	
Embody.....	S.E. drainage.....	.15	.05																													1.40	
Eugene.....	Willamette.....																															.32	
Fairview.....	Coast.....																															.32	
Falls City.....	Willamette.....																															.44	
Fir Glen.....	Coast.....																															.23	
Florence.....	do.....		.08																													.23	
Forest Grove.....	Willamette.....																															.24	
Fort Rock.....	S.E. drainage.....	.07	T.																													.64	
Galice.....	Rogue.....																															.27	
Gardiner.....	Umpqua.....																															.09	
Gibbon.....	Umatilla.....																															.09	
Glencoe.....	Columbia.....		.05																													.33	
Glendale.....	Umpqua.....	T.																														.09	
Glenora.....	Coast.....																															.82	
Gold Beach.....	Rogue.....																															.10	
Golden Falls.....	Coast.....																															.35	
Grande Ronde.....	do.....																															.35	
Grants Pass.....	Rogue.....																															.03	
Grass Valley.....	John Day.....	1.09	.49	.01																												.88	
Greenhorn.....	Snake.....	T.	.49																													.34	
Gumbboot.....	do.....																															.43	
Gurdane.....	Columbia.....		.04																													.15	
Hampton.....	Deschutes.....	.12	.21	.09																												.15	
Happy Home.....	Umpqua.....		.10																													.12	
Harbor.....	Columbia.....																															.12	
Hay Creek.....	Deschutes.....																															.08	
Hazeldell.....	Willamette.....																															.17	
Headworks.....	do.....																															.59	
Heppner.....	Columbia.....																															.14	
Hermiston.....	Umatilla.....		.25																													.12	
Hermoso Rio.....	Deschutes.....																															.47	
Hilgard.....	Gnd Ronde.....	1.30																														.55	
Hood River:	Columbia.....																															.27	
No. 1.....	do.....																															.07	
No. 2.....	do.....																															.07	
No. 3.....	do.....																															.15	
No. 4.....	Willamette.....		.09																													.53	
Hoover.....	Gnd. Ronde.....																															.15	
Howardville.....	Snake.....		.96																													.96	
Huntington.....	John Day.....	.01	.01	.45																												.47	
Ibex Mine.....	do.....		.54	.42																												.96	
Ironside.....	Snake.....		.22	.52	.14																										.02		
Jacksonville.....	Rogue.....		.06																													.14	
Joseph.....	Gnd. Ronde.....		.75		.06																										.28		
Klamath Agency.....	Klamath.....		1.02																													.52	
Klamath Falls.....	do.....			1.34																												.89	
La Grande.....	Gnd. Ronde.....																															.18	
Lakeview.....	Pitt.....																															.55	
Lilyglen.....	Rogue.....																															.05	
Long Creek.....	John																																

TABLE 2.—*Daily precipitation for August, 1912. District No. 12—Continued.*

Stations.	Watershed.	Day of month.																													Total.					
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
<i>Oregon—Contd.</i>																																				
Port Orford	Coast																																	0.97		
Post	Deschutes	.47																																1.33		
Power House	Columbia	.36																																2.03		
Prairie City	John Day	.04	.84	.51																																
Prineville	Deschutes																																			
Prospect	Rogue																																	.25		
Rager Creek	Deschutes	.04	.02	.34																														.95		
Ramsey	Columbia																																	.65		
Range	John Day																																	1.45		
Ray Creek	Columbia		T.																															1.10		
Redmond	Deschutes																																	.34		
Reston	Umpqua																																			
Richland	Snake	.20	.25																																.05	
Riverville	Deschutes	.33																																.71		
Riverside	Malheur	.10	.25	.08																														.43		
Rock Creek	Willamette																																	.33		
Roseburg	Umpqua																																	.59		
Rosland	Deschutes	.15																																.21		
Salem	Willamette	.02																																.81		
Seneca	SE. drainage	.20	.90																																.27	
Silver Lake	do	.37																																.45		
Siskiyou	Rogue																																	.16		
Sisters	Deschutes																																	.09		
Sparta	Snake	.03	.36	1.25	.10																													.31		
Staftord	Willamette																																	.10		
Starkey	Gnd. Ronde	1.40																																.22		
Summit	Willamette																																	.56		
Summit Prairie	Deschutes																																			
Susanville	John Day	.90	T.																															.11		
Tamarack	do																																	.16		
Telocast	Snake	.03	.07																																.35	
The Dalles	Columbia																																	.55		
Tinroof	Umatilla	T.	.63																																.55	
Toledo	Coast																																	.50		
Trail	Rogue																																	.29		
Trask	Coast																																			
Umatilla	Columbia	.25																																.10		
Union	Gnd. Ronde	.98	.01																																.54	
Vale	Malheur	T.	1.22																																.33	
Valley Falls	SE. drainage	.09	.44																																.79	
Van	Malheur																																			
Vida	Willamette																																			
Vistillas	Interior drainage	.04	.22	.15																																.62
Waldo	Rogue																																			
Wallace Orchard	Willamette																																			
Wallowa	Gnd. Ronde	.61																																		
Wallowa	do	T.	1.04																																	
Wamic	Deschutes																																			
Warmspring	do																																			
Wasco	Columbia							*	.71																											
Weches	do																																			
Westfall	Malheur																																			
Weston	Walla Walla	.45																																		
Williams	Rogue																																			
Yonna	Interior drainage	.13	.16																																	

\* Precipitation included in that of the next measurement.

† Separate dates of falls not recorded.

II Precipitation for the 24 hours ending on the morning when it is measured.

T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—*Maximum and minimum temperatures for August, 1912. District No. 12, Columbia Valley.*

Date.	Montana.				Idaho.																Vernon.		Wallace.							
	Kalispell.		Missoula.		Afton, Wyo.		Boise.				Bonners Ferry.		Hot Spring.		Lewiston.		Mackay.		New Meadows.		Pocatello.		Salmon.		Shoshone.		Vernon.		Wallace.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		
1...	66	60	77	61	76	—	82	64	80	55	82	65	84	67	—	—	—	—	69	58	84	54	—	—	68	56	79	59		
2...	76	54	84	57	82	—	85	59	82	52	88	55	91	58	—	—	—	—	80	52	90	58	—	—	78	50	84	50		
3...	73	55	83	56	80	—	76	57	70	50	82	55	75	60	70	46	—	—	79	56	86	53	—	—	72	40	67	52		
4...	72	52	81	57	79	—	79	55	67	47	82	53	82	54	73	47	—	—	76	51	80	41	—	—	68	45	72	52		
5...	76	43	80	45	79	—	84	58	72	48	88	56	88	54	76	40	—	—	83	51	85	40	—	—	75	42	79	42		
6...	70	45	76	52	78	—	82	57	70	40	88	56	85	58	76	46	—	—	81	53	84	43	—	—	71	44	73	47		
7...	75	48	80	48	70	—	83	55	81	41	86	55	89	54	73	54	—	—	75	54	87	44	—	—	70	51	83	43		
8...	82	46	89	46	79	—	96	61	81	44	98	55	98	56	83	51	—	—	84	51	89	41	—	—	79	44	92	47		
9...	74	53	81	54	88	—	81	59	75	52	95	58	83	61	81	54	—	—	89	59	88	49	—	—	80	48	75	49		
10...	73	53	77	54	79	—	81	55	72	46	86	57	86	60	—	—	—	—	82	55	87	46	—	—	78	45	71	48		
11...	69	48	76	50	77	—	81	54	70	47	90	53	82	61	—	—	—	—	82	53	82	42	—	—	77	40	72	48		
12...	69	41	79	38	78	—	84	52	75	37	92	55	86	53	82	45	—	—	85	49	78	38	—	—	80	39	76	42		
13...	79	42	83	40	81	—	90	53	79	38	96	56	92	51	82	44	—	—	87	51	77	36	—	—	80	43	82	40		
14...	82	49	90	42	85	—	82	65	85	40	92	61	85	55	80	49	—	—	87	55	81	40	—	—	84	44	89	42		
15...	83	54	90	54	82	—	84	59	70	50	90	64	75	54	75	42	—	—	77	57	76	38	—	—	68	55	74	49		
16...	59	43	62	45	73	—	67	47	60	44	84	51	69	50	74	47	—	—	66	48	61	33	—	—	66	47	57	42		
17...	62	41	70	41	83	—	73	47	62	45	78	42	72	54	68	34	—	—	61	48	78	37	—	—	63	38	58	46		
18...	57	46	57	49	64	—	71	47	67	44	74	52	68	55	—	—	—	—	68	51	70	36	—	—	61	46	63	45		
19...	63	47	67	48	66	—	74	47	73	38	78	48	77	48	68	40	—	—	72	48	74	47	—	—	62	41	71	48		
20...	72	46	77	43	83	—	82	50	82	42	85	45	85	50	72	39	—	—	79	42	78	36	—	—	72	38	82	41		
21...	77	47	84	44	84	—	89	52	85	43	90	51	93	54	89	43	—	—	86	50	85	37	—	—	78	42	85	44		
22...	80	48	87	45	82	—	91	57	88	47	95	54	95	53	76	50	—	—	88	52	85	42	—	—	75	43	86	45		
23...	88	49	90	44	80	—	94	57	88	47	94	55	98	56	83	55	—	—	89	55	82	43	—	—	81	43	89	48		
24...	88	44	91	46	84	—	94	57	89	48	99	57	97	57	84	54	—	—	92	51	86	40	—	—	83	43	87	46		
25...	80	54	86	50	84	—	90	57	78	50	90	58	89	63	—	—	—	—	88	60	91	41	—	—	84	45	76	40		
26...	82	49	91	46	89	—	93	58	85	44	94	55	90	59	88	45	—	—	92	56	93	43	—	—	87	40	87	47		
27...	71	50	75	62	72	—	80	58	62	49	89	57	77	55	76	51	—	—	77	56	84	37	—	—	70	56	66	51		
28...	66	48	74	45	78	—	79	47	64	44	86	52	64	50	74	40	—	—	81	52	82	38	—	—	74	44	57	46		
29...	57	42	60	46	76	—	64	47	60	40	78	50	68	48	73	43	—	—	67	53	72	38	—	—	65	41	55	40		
30...	58	33	68	30	72	—	73	40	50	32	75	40	60	42	64	34	—	—	69	40	78	27	—	—	62	28	56	33		
31...	54	45	56	46	78	—	71	54	53	43	80	45	68	53	71	34	—	—	78	42	70	38	—	—	70	32	52	46		
Mns..	72.0	47.6	78.1	47.9	78.7	—	81.8	54.4	73.4	44.7	87.1	53.7	82.3	54.9	76.2	45.1	—	—	79.6	51.9	81.3	41.1	—	—	73.6	43.6	74.0	45.7		

Date.	Washington.																																					
	Aberdeen.				Blaine.				Colville.				Kosmos.				Lakeside.				North Head.		North Yakima.		Odessa.		Port Crescent.		Seattle.		Sixprong.		Spokane.		Tacoma.		Tatoosh Island.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.						
1...	62	48	70	54	89	54	74	55	88	65	61	55	86	66	88	59	62	50	68	57	87	59	82	66	70	54	58	52	51	57	51							
2...	64	49	71	45	86	55	73	46	88	60	58	53	86	56	88	54	59	41	71	55	87	59	85	61	72	52	59	52	60	59	52	52						
3...	70	50	70	46	75	50	71	50	77	63	61	55	86	61	86	59	62	51	69	58	89	60	69	58	69	52	60	59	60	58	52	52						
4...	74	52	71	43	68	53	80	44	85	56	61	55	80	53	77	48	64	53	70	57	85	50	73	51	71	55	60	58	60	58	52	52						
5...	78	56	72	47	84	47	83	43	89	61	61	54	88	56	88	48	65	45	77	58	88	50	75	50	75	54	75	52	75	52	52	52						
6...	80	48	74	50	82	43	84	45	87	59	60	56	86	61	85	47	66	48	76	57	84	54	71	55	77	55	83	54	73	54	54	52						
7...	87	50	78	45	86	41	95	46	89	60	70	56	89	58	88	48	75	46	81	53	88	59	80	52	86	56	90	54	86	56	50	50						
8...	63	50	75	57	81	46	77	57	83	61	59	56	88	57	95	47	58	48	71	59	89	57	89															

TABLE 3. Maximum and minimum temperatures for August, 1912. District No. 12—Continued.

Date.	Walla Walla, Wash.		Oregon.																			
			Ashland.		Baker.		Eugene.		Goldbeach.		Hermiston.		Marshfield.		Portland.		Prineville.		Roseburg.		The Dalles.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1.	86	66	81	54	76	59	72	55	66	51	92	65	—	—	74	58	—	—	75	58	84	64
2.	88	61	80	54	78	54	75	49	67	51	88	54	—	—	75	52	—	—	79	50	85	55
3.	75	57	78	53	63	49	72	52	68	48	85	60	—	—	67	55	—	—	75	48	84	64
4.	80	57	83	50	76	46	78	48	65	48	86	53	—	—	77	53	—	—	84	48	85	52
5.	86	61	84	56	76	49	80	55	66	50	90	55	—	—	82	54	—	—	86	51	87	56
6.	84	61	87	54	74	47	84	56	65	49	89	55	—	—	81	58	—	—	89	53	87	60
7.	90	62	88	57	78	47	85	65	64	52	91	50	—	—	93	60	—	—	89	55	93	59
8.	91	64	80	56	87	51	75	56	67	55	89	53	—	—	67	59	—	—	78	59	91	68
9.	80	60	78	60	72	53	76	54	66	51	87	56	—	—	76	60	—	—	80	58	80	57
10.	82	64	80	53	76	47	74	50	72	52	88	53	—	—	74	60	—	—	80	54	78	60
11.	81	53	86	54	71	46	76	49	73	55	83	55	—	—	74	58	—	—	81	50	80	55
12.	84	57	89	55	76	43	80	52	70	52	86	47	—	—	81	58	—	—	87	49	86	52
13.	92	59	91	59	81	47	82	54	61	52	91	45	—	—	90	59	—	—	88	52	92	54
14.	89	61	88	59	81	51	76	52	61	54	93	55	—	—	68	58	—	—	67	55	81	61
15.	68	54	66	52	63	38	66	53	66	54	90	56	—	—	61	54	—	—	64	52	74	58
16.	62	54	68	44	59	36	65	54	69	51	65	53	—	—	59	52	—	—	70	52	71	51
17.	68	51	68	48	63	45	67	49	68	52	70	52	—	—	68	52	—	—	70	51	73	52
18.	68	54	76	44	59	44	76	49	69	52	71	53	—	—	72	54	—	—	76	46	74	50
19.	77	51	83	50	68	38	77	46	72	55	80	45	—	—	78	54	—	—	79	49	81	49
20.	85	56	92	52	77	41	86	57	67	50	85	48	—	—	86	58	—	—	89	50	88	50
21.	92	62	92	57	83	47	83	54	63	52	92	55	—	—	91	62	—	—	94	56	93	57
22.	96	65	91	57	85	49	81	53	62	52	97	51	—	—	90	65	—	—	87	58	97	64
23.	99	66	93	59	88	48	79	53	64	54	99	54	—	—	84	59	—	—	91	55	99	64
24.	95	68	91	58	88	51	80	52	62	54	96	48	—	—	78	58	—	—	79	56	93	65
25.	87	65	88	55	85	46	77	48	61	53	92	60	—	—	77	60	—	—	74	57	84	62
26.	87	63	78	56	87	51	72	50	63	53	87	56	—	—	66	57	—	—	70	55	80	60
27.	70	55	71	53	75	47	70	52	63	49	80	53	—	—	67	54	—	—	66	49	70	54
28.	63	52	70	53	58	43	64	51	62	46	69	45	—	—	64	51	—	—	66	44	70	46
29.	68	51	69	44	56	38	69	53	65	45	71	53	—	—	70	50	—	—	70	40	69	46
30.	63	48	73	41	63	31	66	49	62	49	67	42	—	—	66	54	—	—	68	47	66	46
31.	67	52	67	51	63	46	67	50	65	57	70	55	—	—	67	53	—	—	69	58	67	55
Mns.	80.7	58.5	80.9	53.2	73.7	46.1	75.2	52.3	65.6	51.5	84.5	52.9*	—	—	74.9	56.4	—	—	78.1	52.1	82.0	56.3
																				86.7	49.0	

<sup>a</sup>, <sup>b</sup>, <sup>c</sup>, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§ § Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.